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**(54) Title: NEW MUTATIONAL PROFILES IN HIV-1 REVERSE TRANSCRIPTASE CORRELATED WITH PHENOTYPIC DRUG RESISTANCE**

**(57) Abstract:** The present invention is directed to the field of nucleic acid diagnostics and the identification of base variation in target nucleic acid sequences. More particularly, the present invention relates to the use of such genotypic characterization of a target population of HIV and the subsequent association, i.e., correlation, of this information to phenotypic interpretation in order to correlate virus mutational profiles with drug resistance. The invention also relates to methods of utilizing the mutational profiles of the invention in drug development, i.e., drug design, drug modification, and therapy, treatment design, clinical management and diagnostic analysis.

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 C12Q1/48 C12Q1/7

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EMBASE, EPO-Internal, WPI Data, PAJ, BIOSIS, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>STEIN CHRISTIAN A ET AL: "Sequence analysis of proviral HIV RT amplified directly by a semi-quantitative technique from AZT treated patients"  <i>JOURNAL OF MEDICAL VIROLOGY</i>,    vol. 44, no. 2, 1994, pages 115-121,    XP009018682    ISSN: 0146-6615    p.118, left-hand column, 1. 5    abstract; table II</p> <p>---</p> <p>-/-</p>	1-10

Further documents are listed in the continuation of box C:

Patent family members are listed in annex.

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Date of the actual completion of the international search

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	SCHINAZI R F ET AL: "Mutations in retroviral genes associated with drug resistance: 2000-2001 update" INTERNATIONAL ANTIVIRAL NEWS 2000 UNITED KINGDOM, vol. 8, no. 5, 2000, pages 65-91, XP009018670 ISSN: 0965-2310 the whole document	1-10
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A	WO 02 33402 A (HERTOGS KURT ;VIRCO NV (BE); HARRIGAN RICHARD P (CA); LARDER BREND) 25 April 2002 (2002-04-25) the whole document	1-10
A	WO 97 27332 A (INNOGENETICS NV ;STUYVER LIEVEN (BE); LOUWAGIE JOOST (BE); ROSSAU) 31 July 1997 (1997-07-31) the whole document	1-10

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